

(a) a first functional layer containing a first plastic film that is a polyester or a polyolefin or an extrusion layer of a polyolefin or one or more lacquer layers, or print and lacquer layers, or print layers;

(b) a metal foil; and

(c) a second functional layer that is a second plastic film comprising a film of (i) a plastic consisting of coextruded polyamide layer/polypropylene layer where the polyamide layer is in direct contact with the polypropylene layer, and (ii) optionally at least one suitable or conventional plastic system additive in plastic (i), the coextruded polyamide layer/polypropylene has a bond sufficient to prevent delamination thereof during sterilization.

12. The sterilizable composite film according to Claim 11, wherein the composite film having a layer structure, contains in sequence:

(a) the first functional layer containing the first plastic film that is a polyester;

(b) the metal foil; and

(c) the second functional layer that is the second plastic film that is the coextruded polyamide/polypropylene film.

13. The sterilizable composite film according to Claim 11, wherein the first functional layer (a) containing the first plastic film that is a polyester that is monoaxially or biaxially stretched.

14. The sterilizable composite film according to Claim 11, wherein the first functional layer (a) containing the first plastic film that is a polyester that is polyethylene terephthalate.

15. The sterilizable composite film according to Claim 11, wherein the composite film having a layer structure contains in sequence:

- (a) one or more lacquer layers, or print and lacquer layers, or print layers;
- (b) the metal foil; and
- (c) the second plastic film that is the co-extruded polyamide/polypropylene film.

16. The sterilizable composite film according to Claim 11, wherein the polyester film of layer (a) has a thickness of 8 to 25 μm , the metal foil has a thickness of 5 to 100 μm , and the coextruded polyamide/polypropylene film has a thickness of 50 to 150 μm .

17. The sterilizable composite film according to Claim 11, wherein the polyester film of layer (a) has a thickness of 10 to 18 μm , the metal foil has a thickness of 7 to 25 μm and the coextruded polyamide/polypropylene film has a thickness of 60 to 90 μm .

18. The sterilizable composite film according to Claim 11, wherein the polyester film of layer (a) has a thickness of 12 μm , the metal foil has a thickness of 7 to 15 μm and the coextruded polyamide/polypropylene has a thickness of 70 to 80 μm .

19. The sterilizable composite film according to Claim 11, wherein the metal foil is an aluminum foil.

20. The sterilizable composite film according to Claim 11, wherein the metal foil is an aluminum foil of pure aluminum.

21. The sterilizable composite film according to Claim 11, wherein the metal foil is an aluminum foil or an aluminum alloy selected from the group consisting of AlMn, AlFeMn, AlFeSi and AlFeSiMn.

22. The sterilizable composite film according to Claim 21, wherein the aluminum alloy has a purity of 97.5 percent or higher.

23. The sterilizable composite film according to Claim 22, wherein the aluminum alloy has a purity of 98.5 percent or higher.

24. The sterilizable composite film according to Claim 11, wherein the metal foil is pretreated with a primer on one or both sides.

25. The sterilizable composite film according to Claim 11, wherein a bonding agent and/or laminate adhesive is provided between the first functional layer (a) and the metal foil (b), and between the metal foil (b) and the second functional layer (c).

26. A pouch for packaging, made from the sterilizable composite film according to Claim 11.

27. The sterilizable composite film according to Claim 11, wherein, in first functional layer (a), the polyester is a polyalkylene-terephthalate or polyalkylene-isophthalate with the alkylene groups or radicals having 2 to 10 carbon atoms or alkylene groups having 2 to 10 carbon atoms that are interrupted by at least one -O-.

28. The sterilizable composite film according to Claim 27, wherein the polyester is polypropylene-terephthalate.

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